# (19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 24 February 2005 (24.02.2005)

**PCT** 

# (10) International Publication Number WO 2005/017926 A2

(51) International Patent Classification<sup>7</sup>:

H01F

(21) International Application Number:

PCT/US2004/025134

(22) International Filing Date: 2 August 2004 (02.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

2003-313258 2 August 2003 (02.08.2003) JF 2003-345525 3 October 2003 (03.10.2003) JF

- (71) Applicant (for all designated States except US): INOKI, Kanji [JP/US]; 104 West 40th Street, #1510, New York, NY 10018 (US).
- (71) Applicant and
- (72) Inventor: KINOSHITA, Yukio [JP/JP]; International Natural Power Institute of Technolog, y Co. Ltd., Bella Roppongi 203, 4-1-9, Roppongi, Tokyo 106-0032 (JP).
- (74) Agent: GULBIN, John, F.; Pitney Hardin LLP, 7 Times Square, New York, NY 10036-7311 (US).

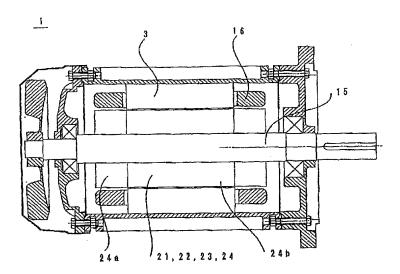
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

 without international search report and to be republished upon receipt of that report

[Continued on next page]

### (54) Title: ROTARY MACHINE AND ELECTROMAGNETIC MACHINE



(57) Abstract: The objective of the present invention is to provide a configuration of the permanent magnets used for rotors in a rotating electronic device and the method of utilizing the same, thereby improving the efficiency, performance and output thereof. It also intends to provide a rotating electronic device that can be miniaturized. To achieve the above objectives, permanent magnets are arranged radially and circularly on a rotor to control the magnetic flux generated by permanent magnets arranged radially on the rotor to be approximately twice as much as the primary magnetic flux generated by permanent magnets arranged circularly thereon. On the rotating surface of the rotor, a secondary magnetic flux is provided and a shape and width of the grooves are modified such that the magnetic flux distribution resulting from the overall interaction of each magnetic flux generated in each magnetic pole on the rotor appears substantially as a sine wave.

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